ABSTRACT OF THE DISCLOSURE

There is provided a data re-synchronization apparatus for suppressing occurrence of a jitter in a high-speed serial signal transmitted over a long distance to improve a reliability of re-synchronized data. In the apparatus, a shift register serial-parallel conversion circuit inputs the serial signal ant converts an input data signal to parallel data signals of a predetermined number of parallel bits. An input data extension circuits extend the parallel data signals by a predetermined clock length time-axially to provide extended data signals. An input pattern detection circuit sends an input take-in signal so that data can be taken in at roughly a center of variation points of the extended data signals, while a re-synchronized data take-in signal generation circuit latches the input take-in signal in synchronization with an output clock signal. Data re-synchronization circuits latch the extended data signals respectively at input timing of a re-take-in signal, while a data delay circuit holds data until bit strings of an idle pattern are all output. A data selection circuit outputs an output data signal in synchronization with the idle pattern.